# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: E. B. Elhilo; Art Unit: 1796; Docket No.: 3644

In RE:

Application of Cecile PASQUIER, et al

Ser. No.:

10/581,066

Filed:

May 31, 2006

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# **AMENDMENT**

Hon. Commissioner of Patents and Trademarks,

Washington, D.C. 20231

Sir:

Responsive to the Office Action dated January 23, 2008, please make the following changes and consider the following REMARKS:

### AMENDMENTS TO THE CLAIMS:

Please cancel claims 1 to 15 without prejudice and add new claims 16 to 30:

Claims 1 to 15. (canceled)

16. (new) A ready-to-use agent for coloring keratin fibers, wherein said ready-to-use agent contains

(a) at least one hydrazone derivative of formula (I), or a physiologically compatible salt thereof:

wherein X denotes oxygen, sulfur or N-R2,

Y denotes C-R3 or nitrogen, and

**Z** denotes C-R4 or nitrogen,

provided that a heterocyclic ring in said at least one hydrazone derivative of the formula (I) contains at the most three hetero atoms;

A denotes hydrogen, an acetyl group, a trifluoroacetyl group, a formyl group, a  $(C_1-C_6)$ -alkyl-sulfonyl group, or an arylsulfonyl group;

**R1** and **R2** are the same or different and, independently of each other, denote a saturated or unsaturated ( $C_1$ - $C_{12}$ )-alkyl group, a halogen-substituted ( $C_1$ - $C_{12}$ )-alkyl group, a hydroxy-( $C_1$ - $C_{12}$ )-alkyl group, an amino-( $C_1$ - $C_{12}$ )-alkyl group, a sulfonic acid-( $C_1$ - $C_{12}$ )-alkyl group, a formyl group, a -C(O)-( $C_1$ - $C_{12}$ )-alkyl group, a substituted or unsubstituted -C(O)-phenyl group, a -C(O)NH-( $C_1$ - $C_{12}$ )-alkyl group, a substituted or unsubstituted

-C(O)NH-phenyl group, a substituted or unsubstituted phenyl group, or a benzyl group; R3 and R4 are the same or different and, independently of each other, denote hydrogen, a halogen atom, a saturated or unsaturated ( $C_1$ - $C_{12}$ )-alkyl group, a halogen-substituted ( $C_1$ - $C_{12}$ )-alkyl group, a hydroxyl group, a hydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a ( $C_1$ - $C_{12}$ )-alkoxy group, a cyano group, a nitro group, an amino group, a ( $C_1$ - $C_1$ )-alkylamino group, a di( $C_1$ - $C_1$ )-alkylamino group, a carboxyl group, a -C(O)O-( $C_1$ - $C_1$ )-alkyl group, a substituted or unsubstituted -C(O)O-phenyl group, a substituted or unsubstituted phenyl group, or a naphthyl group;

and when **Y** and **Z** denote C-**R3** and C-**R4**, **R3** and **R4** together with a remainder of the hydrazone derivative can form a heterocyclic or carbocyclic, saturated or unsaturated, substituted or unsubstituted ring system;

(b) at least one CH-active compound selected from the group consisting of compounds of formulas (II) to (IX) as follows:

wherein **R5** denotes a cyano group, a (CO)-**R6** carbonyl group, wherein **R6** denotes a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group or an aryl group;

wherein **R7** and **R8** are the same or different and, independently of each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound, and **D** denotes a sulfur atom or an oxygen atom;

wherein **R9** denotes a hydrogen atom, a nitrile group, a  $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic compound or a (CO)-R12 carbonyl group, wherein **R12** denotes hydrogen, a hydroxyl group, a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group, or an aryl group; and **R10** and **R11** are the same or different and, independently or each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly-

 $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic aromatic compound;

wherein **E** denotes an oxygen atom, a sulfur atom of an NR' amino group, with R' denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group, and **R13** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a ( $C_1$ - $C_{12}$ )-alkyl group, a monohydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a polyhydroxy-( $C_2$ - $C_{12}$ )-alkyl group, a mono-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a poly-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group;

wherein **G** and **G**' are the same or different and, independently or each other, denote an oxygen atom, a sulfur atom, or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group,

**R14** denotes hydrogen, a substituted or unsubstituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound; and

wherein **V** denotes an oxygen atom or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted- $(C_1-C_{12})$ -alkyl group; and **R15** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group; and

- (c) at least one oxidant.
- 17. (new) The agent as defined in claim 16, wherein X denotes sulfur, Y denotes C-R3, Z denotes C-R4 and A denotes hydrogen.
- 18. (new) The agent as defined in claim 16, wherein said at least one hydrazone derivative of the formula (I) is selected from the group consisting of 3-methyl-2(3H)-thiazolone hydrazone,
- 3,4-dimethyl-2(3H)-thiazolone hydrazone,

- 4-tert.butyl-3-methyl-2(3H)-thiazolone hydrazone,
- 3-methyl-4-phenyl-2(3H)-thiazolone hydrazone,
- 3-methyl-4-(4-tolyl)-2(3H)-thiazolone hydrazone,
- 4-(4-methoxy)phenyl-3-methyl-2(3H)-thiazolone hydrazone,
- 4-(4-ethoxy)phenyl-3-methyl-2(3H)-thiazolone hydrazone,
- 4-(4-bromophenyl)-3-methyl-2(3H)-thiazolone hydrazone,
- 4-(3-bromophenyl)-3-methyl-2(3H)-thiazolone hydrazone,
- 4-(4-chlorophenyl)-3-methyl-2(3H)-thiazolone hydrazone,
- 4-(3-chlorophenyl)-3-methyl-2(3H)-thiazolone hydrazone,
- 3-methyl-4-(4-nitrophenyl)-2(3H)-thiazolone hydrazone,
- 3-methyl-4-(3-nitrophenyl)-2(3H)thiazolone hydrazone,
- 4-[(1,1'-biphenyl)-4-yl]-3-methyl-2(3H)-thiazolone hydrazone,
- ethyl 2-hydrazono-2,3-dihydro-3-methyl-4-thiazolecarboxylate,
- 3,4,5-trimethyl-2(3H)-thiazolone hydrazone,
- 3,4-dimethyl-5-phenyl-2(3H)-thiazolone hydrazone,
- 3,5-dimethyl-4-phenyl-2(3H)-thiazolone hydrazone,
- 4,5-diphenyl-3-methyl-2(3H)-thiazolone hydrazone,
- 5-ethyl-3-methyl-4-phenyl-2(3H)-thiazolone hydrazone,
- 4-(4-bromophenyl)-3-methyl-5-phenyl-2(3H)-thiazolone hydrazone,
- 3-methyl-5-phenyl-4-(4-tolyl)-2(3H)-thiazolone hydrazone,
- 5-(4-chlorophenyl)-4-phenyl-3-methyl-2(3H)-thiazolone hydrazone,
- 5-(4-chlorophenyl)-4-(4-methoxyphenyl)-3-methyl-2(3H)-thiazolone hydrazone,
- ethyl 2-hydrazono-2,3-dihydro-3,4-dimethyl-4-thiazolecarboxylate,

- 4-amino-2-hydrazono-2,3-dihydro-3-methyl-5-thiazole carbonitrile
- 4,5-dimethyl-3-ethyl-2(3H)-thiazolone hydrazone,
- ethyl 2-hydrazono-2,3-dihydro-3-ethyl-4-methylthiazolecarboxylate,
- 5-methyl-3-(1-methylethyl)-4-phenyl-2(3H)-thiazolone hydrazone,
- 4,5-diphenyl-3-(1-methylethyl)-2(3H)-thiazolone hydrazone
- 4,5-diphenyl-3-propyl-2(3H)-thiazolone hydrazone,
- 3-butyl-4,5-diphenyl-2(3H)-thiazolone hydrazone,
- 4,5-diphenyl-3-(2-methylpropyl)-2(3H)-thiazolone hydrazone,
- 3-(2-propenyl)-2(3H)-thiazolone hydrazone,
- 4-methyl-3-(2-propenyl)-2(3H)-thiazolone hydrazone,
- 4-tert.butyl-3-(2-propenyl)-2(3H)-thiazolone hydrazone,
- 4-phenyl-3-(2-propenyl)-2(3H)-thiazolone hydrazone,
- 4,5-diphenyl-3-(2-propenyl)-2(3H)-thiazolone hydrazone,
- 3-hydroxyethyl-2(3H)-thiazolone hydrazone,
- 3-hydroxyethyl-4-methyl-2(3H)-thiazolone hydrazone,
- 3-aminoethyl-2(3H)-thiazolone hydrazone,
- 3-aminoethyl-4-methyl-2(3H)-thiazolone hydrazone,
- 3-phenyl-2(3H)-thiazolone hydrazone,
- 4-methyl-3-phenyl-2(3H)-thiazolone hydrazone,
- 3,4-diphenyl-2(3H)-thiazolone hydrazone,
- 4-p-biphenylyl-3-phenyl-2(3H)-thiazolone hydrazone,
- 4-(4-methoxy)phenyl-3-phenyl-2(3H)-thiazolone hydrazone,
- 4-tert.butyl-3-phenyl-2(3H)-thiazolone hydrazone,

- 3,4-diphenyl-5-methyl-2(3H)-thiazolone hydrazone,
- 3,4,5-triphenyl-2(3H)-thiazolone hydrazone,
- 4,5-dimethyl-3-(phenylmethyl)-2(3H)-thiazolone hydrazone,
- ethyl 2-hydrazono-2,3-dihydro-3-[(phenylamino)carbonyl]-4-methylthiazolecarboxylate
- 3-methyl-4,5,6,7-tetrahydro-2(3H)-benzothiazolone hydrazone,
- 3-methyl-2(3H)-benzothiazolone hydrazone,
- 3,6-dimethyl-2(3H)-benzothiazolone hydrazone,
- 6-chloro-3-methyl-2(3H)-benzothiazolone hydrazone,
- 7-chloro-3-methyl-2(3H)-benzothiazolone hydrazone,
- 6-hydroxy-3-methyl-2(3H)-benzothiazolone hydrazone,
- 5-methoxy-3-methyl-2(3H)-benzothiazolone hydrazone,
- 7-methoxy-3-methyl-2(3H)-benzothiazolone hydrazone,
- 5,6-dimethoxy-3-methyl-2(3H)-benzothiazolone hydrazone,
- 5-ethoxy-3-methyl-2(3H)-benzothiazolone hydrazone,
- 6-ethoxy-3-methyl-2(3H)-benzothiazolone hydrazone,
- 3-methyl-5-nitro-2(3H)-benzothiazolone hydrazone,
- 3-methyl-6-nitro-2(3H)-benzothiazolone hydrazone,
- 5-acetamido-3-methyl-2(3H)-benzothiazolone hydrazone,
- 6-acetamido-3-methyl-2(3H)-benzothiazolone hydrazone,
- 5-anilino-3-methyl-2(3H)-benzothiazolone hydrazone,
- 6-anilino-3-methyl-2(3H)-benzothiazolone hydrazone,
- 2-hydrazono-2,3-dihydro-3-methyl-6-benzothiazolecarboxylic acid,
- 2-hydrazono-2,3-dihydro-3-methyl-4-benzothiazolesulfonic acid,

- 2-hydrazono-2,3-dihydro-3-methyl-5-benzothiazolesulfonic acid,
- 2-hydrazono-2,3-dihydro-3-methyl-6-benzothiazolesulfonic acid,
- 2-hydrazono-2,3-dihydro-3-methyl-7-benzothiazolesulfonic acid,
- 2-hydrazono-2,3-dihydro-N,N,3-trimethyl-6-benzothiazolesulfonamide,
- [(2-hydrazono-2,3-dihydro-3-methyl-6-benzothiazolyl)oxy]acetic acid hydrazide,
- 3-methylnaphtho-[2,3-d]thiazol-2(3H)-one hydrazone
- 3-ethyl-2(3H)-benzothiazolone hydrazone,
- 6-ethoxy-3-ethyl-2(3H)-benzothiazolone hydrazone,
- 3-propyl-2(3H)-benzothiazolone hydrazone,
- 3-butyl-2(3H)-benzothiazolone hydrazone,
- 3-hexyl-2(3H)-benzothiazolone hydrazone,
- 3-hydroxyethyl-2(3H)-benzothiazolone hydrazone,
- 3-aminoethyl-2(3H)-benzothiazolone hydrazone,
- 3-p-methylbenzyl-2(3H)-benzothiazolone hydrazone,
- 2-hydrazono-2,3-dihydro-3-(2-hydroxyethyl)-6-benzothiazolecarboxylic acid
- 2-hydrazono-2,3-dihydro-6-methoxy-3(2H)-benzothiazole propane sulfonic acid,
- 6-hexadecyloxy-2-hydrazono-3(2H)-benzothiazole propane sulfonic acid,
- ethyl 2-keto-3-benzothiazolineacetate hydrazone,
- 3-acetyl-2(3H)benzothiazolone hydrazone and
- 2-hydrazono-3(2H)benzothiazole carboxaldehyde.
- 19. (new) The agent as defined in claim 16, wherein said at least one active CH-active compound is selected from the group consisting of cyanoacetic acid, methyl cyano-

acetate, ethyl cyanoacetate, malonic acid dinitrile, pivaloylacetonitrile, 2-cyano-acetamide, 2-cyano-1-methyl-4-nitrobenzene, barbituric acid, thiobarbituric acid, 1,3-dimethylthiobarbituric acid, 1-methyl-1,2-dihydro-6-hydroxy-4-methyl-2-keto-pyridine-3-carbonitrile, 1-ethyl-1,2-dihydro-6-hydroxy-4-methyl-2-ketopyridine-3-carbonitrile, 1-hydroxyethyl-1,2-dihydro-6-hydroxy-4-methyl-2-ketopyridine-3-carbonitrile, 1,3-dihydro-2H-indol-2-one, benzofuran-3(2H)-one, 2-phenyl-3,5-dihydroimidazol-4-one, 3-indoxyl acetate, 2-thioxo-4-thiazolidinone and 4-keto-2-thioxo-3-thiazolidinyl-acetic acid.

- 20. (new) The agent as defined in claim 16, wherein said at least one oxidant is selected from the group consisting of hydrogen peroxide, addition compounds of said hydrogen peroxide, persalts, peracids and enzymatic oxidation systems.
- 21. (new) The agent as defined in claim 16, wherein said at least one oxidant is selected from the group consisting of hydrogen peroxide, addition products of said hydrogen peroxide and persalts.
- 22. (new) The agent as defined in claim 16, containing from 0.01 to 10 weight percent of said at least one hydrazone derivative of the formula (I), from 0.01 to 10 weight percent of said at least one CH-active compound, and from 0.01 to 10 weight percent of said at least one oxidant.

- 23. (new) The agent as defined in claim 16, additionally containing from 0.01 to 10 weight percent of a physiologically unobjectionable direct dye and wherein said physiologically unobjectionable direct dye is selected from the group consisting of cationic dyes, anionic dyes, disperse dyes, nitro dyes, azo dyes, quinone dyes and triphenylmethane dyes.
- 24. (new) The agent as defined in claim 16, having a pH from 7 to 11.
- 25. (new) The agent as defined in claim 16, which is a hair colorant.
- 26. (new) A two-component kit consisting of

a first dye carrier component (A1) comprising at least one hydrazone derivative of formula (I), or a physiologically compatible salt thereof:

wherein **X** denotes oxygen, sulfur or N-R2,

Y denotes C-R3 or nitrogen, and

**Z** denotes C-**R4** or nitrogen,

provided that a heterocyclic ring in said at least one hydrazone derivative of the formula (I) contains at the most three hetero atoms;

A denotes hydrogen, an acetyl group, a trifluoroacetyl group, a formyl group, a (C<sub>1</sub>-C<sub>6</sub>)-alkyl-sulfonyl group, or an arylsulfonyl group;

R1 and R2 are the same or different and, independently of each other, denote a saturated or unsaturated (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a halogen-substituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a hydroxy- $(C_1-C_{12})$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, a sulfonic acid- $(C_1-C_{12})$ alkyl group, a formyl group, a -C(O)-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted -C(O)-phenyl group, a -C(O)NH-( $C_1$ - $C_{12}$ )-alkyl group, a substituted or unsubstituted -C(O)NH-phenyl group, a substituted or unsubstituted phenyl group, or a benzyl group; R3 and R4 are the same or different and, independently of each other, denote hydrogen. a halogen atom, a saturated or unsaturated (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a halogen-substituted  $(C_1-C_{12})$ -alkyl group, a hydroxyl group, a hydroxy- $(C_1-C_{12})$ alkyl group, a  $(C_1-C_{12})$ -alkoxy group, a cyano group, a nitro group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a di $(C_1-C_{12})$ -alkylamino group, a carboxyl group, a -C(O)O-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted -C(O)O-phenyl group, a substituted or unsubstituted phenyl group, or a naphthyl group; and when Y and Z denote C-R3 and C-R4, R3 and R4 together with a remainder of the hydrazone derivative can form a heterocyclic or carbocyclic, saturated or unsaturated, substituted or unsubstituted ring system; and

a second dye carrier component (A2) comprising an oxidant and at least one CH-active compound selected from the group consisting of compounds of formulas (II) to (IX) as follows:

wherein **R5** denotes a cyano group, a (CO)-**R6** carbonyl group, wherein **R6** denotes a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl

group or an aryl group;

wherein **R7** and **R8** are the same or different and, independently of each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound, and **D** denotes a sulfur atom or an oxygen atom;

wherein **R9** denotes a hydrogen atom, a nitrile group, a  $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic compound or a (CO)-R12 carbonyl group, wherein **R12** denotes hydrogen, a hydroxyl group, a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group, or an aryl group; and **R10** and **R11** are the same or different and, independently or each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a

polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic aromatic compound;

wherein **E** denotes an oxygen atom, a sulfur atom of an NR' amino group, with R' denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group, and **R13** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a ( $C_1$ - $C_{12}$ )-alkyl group, a monohydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a polyhydroxy-( $C_2$ - $C_{12}$ )-alkyl group, a mono-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a poly-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group;

wherein **G** and **G**' are the same or different and, independently or each other, denote an oxygen atom, a sulfur atom, or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group,

R14 denotes hydrogen, a substituted or unsubstituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound; and

wherein **V** denotes an oxygen atom or an NR"amino group, with R" denoting hydrogen or a substituted or unsubstituted- $(C_1-C_{12})$ -alkyl group; and **R15** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group.

# 27. (new) A three-component kit consisting of

a first dye carrier component (A1) comprising at least one hydrazone derivative of formula (I), or a physiologically compatible salt thereof:

wherein X denotes oxygen, sulfur or N-R2,

Y denotes C-R3 or nitrogen, and

16

Z denotes C-R4 or nitrogen,

provided that a heterocyclic ring in said at least one hydrazone derivative of the formula (I) contains at the most three hetero atoms;

A denotes hydrogen, an acetyl group, a trifluoroacetyl group, a formyl group, a  $(C_1-C_6)$ -alkyl-sulfonyl group, or an arylsulfonyl group;

R1 and R2 are the same or different and, independently of each other, denote a saturated or unsaturated (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a halogen-substituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a hydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, an amino-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a sulfonic acid-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a formyl group, a -C(O)-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted -C(O)-phenyl group, a -C(O)NH-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted -C(O)NH-phenyl group, a substituted or unsubstituted phenyl group, or a benzyl group; R3 and R4 are the same or different and, independently of each other, denote hydrogen, a halogen atom, a saturated or unsaturated (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a halogen-substituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a hydroxyl group, a hydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a (C<sub>1</sub>-C<sub>12</sub>)-alkoxy group, a cyano group, a nitro group, an amino group, a (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a di(C<sub>1</sub>-C<sub>12</sub>)-alkylamino group, a carboxyl group, a -C(O)O-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted phenyl group, or a naphthyl group;

and when Y and Z denote C-R3 and C-R4, R3 and R4 together with a remainder of the hydrazone derivative can form a heterocyclic or carbocyclic, saturated or unsaturated, substituted or unsubstituted ring system;

a second dye carrier component (A2) comprising an oxidant and at least one CH-active compound selected from the group consisting of compounds of formulas

(II) to (IX) as follows:

wherein **R5** denotes a cyano group, a (CO)-**R6** carbonyl group, wherein **R6** denotes a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group or an aryl group;

wherein **R7** and **R8** are the same or different and, independently of each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound, and **D** denotes a sulfur atom or an oxygen atom;

wherein **R9** denotes a hydrogen atom, a nitrile group, a  $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic compound or a (CO)-R12 carbonyl group, wherein **R12** denotes hydrogen, a hydroxyl group, a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group, or an aryl group; and **R10** and **R11** are the same or different and, independently or each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, or a carbocyclic or heterocyclic aromatic compound;

wherein **E** denotes an oxygen atom, a sulfur atom of an NR' amino group, with R' denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group, and **R13** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a ( $C_1$ - $C_{12}$ )-alkyl group, a monohydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a polyhydroxy-( $C_2$ - $C_{12}$ )-alkyl group, a mono-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a poly-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group;

wherein **G** and **G**' are the same or different and, independently or each other, denote an oxygen atom, a sulfur atom, or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group,

**R14** denotes hydrogen, a substituted or unsubstituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound; and

wherein **V** denotes an oxygen atom or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group; and **R15** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a monohydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a polyhydroxy-(C<sub>2</sub>-C<sub>12</sub>)-alkyl group, a mono-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, a poly-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, an amino-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group; and a third component (A3) comprising a pH adjusting agent.

# 28. (new) A two-component kit consisting of

a dye carrier component (A1) consisting of a powdered dye composition, said powdered dye composition comprising

(a) at least one hydrazone derivative of formula (I), or a physiologically compatible salt thereof:

wherein X denotes oxygen, sulfur or N-R2,

Y denotes C-R3 or nitrogen, and

Z denotes C-R4 or nitrogen,

provided that a heterocyclic ring in said at least one hydrazone derivative of the formula (I) contains at the most three hetero atoms;

**A** denotes hydrogen, an acetyl group, a trifluoroacetyl group, a formyl group, a  $(C_1-C_6)$ -alkyl-sulfonyl group, or an arylsulfonyl group;

R1 and R2 are the same or different and, independently of each other, denote a saturated or unsaturated ( $C_1$ - $C_{12}$ )-alkyl group, a halogen-substituted ( $C_1$ - $C_{12}$ )-alkyl group, a hydroxy-( $C_1$ - $C_{12}$ )-alkyl group, an amino-( $C_1$ - $C_{12}$ )-alkyl group, a sulfonic acid-( $C_1$ - $C_{12}$ )-alkyl group, a formyl group, a -C(O)-( $C_1$ - $C_{12}$ )-alkyl group, a substituted or unsubstituted -C(O)-phenyl group, a -C(O)NH-( $C_1$ - $C_{12}$ )-alkyl group, a substituted or unsubstituted -C(O)NH-phenyl group, a substituted or unsubstituted phenyl group, or a benzyl group; R3 and R4 are the same or different and, independently of each other, denote hydrogen, a halogen atom, a saturated or unsaturated ( $C_1$ - $C_{12}$ )-alkyl group, a halogen-substituted ( $C_1$ - $C_{12}$ )-alkyl group, a hydroxyl group, a hydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a ( $C_1$ - $C_{12}$ )-alkoxy group, a cyano group, a nitro group, an amino group, a ( $C_1$ - $C_{12}$ )-alkylamino group, a di( $C_1$ - $C_{12}$ )-alkylamino group, a carboxyl group, a -C(O)O-( $C_1$ - $C_1$ 2)-alkyl group, a

substituted or unsubstituted -C(O)O-phenyl group, a substituted or unsubstituted phenyl group, or a naphthyl group;

and when Y and Z denote C-R3 and C-R4, R3 and R4 together with a remainder of the hydrazone derivative can form a heterocyclic or carbocyclic, saturated or unsaturated, substituted or unsubstituted ring system;

(b) at least one CH-active compound selected from the group consisting of compounds of formulas (II) to (IX) as follows:

wherein **R5** denotes a cyano group, a (CO)-**R6** carbonyl group, wherein **R6** denotes a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group or an aryl group;

wherein **R7** and **R8** are the same or different and, independently of each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound, and **D** denotes a sulfur atom or an

oxygen atom;

wherein **R9** denotes a hydrogen atom, a nitrile group, a  $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic compound or a (CO)-R12 carbonyl group, wherein **R12** denotes hydrogen, a hydroxyl group, a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group, or an aryl group; and **R10** and **R11** are the same or different and, independently or each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic aromatic compound;

wherein **E** denotes an oxygen atom, a sulfur atom of an NR' amino group, with R' denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group, and **R13** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a ( $C_1$ - $C_{12}$ )-alkyl group, a monohydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a polyhydroxy-( $C_2$ - $C_{12}$ )-alkyl group, a mono-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a poly-

 $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group;

wherein  $\bf G$  and  $\bf G'$  are the same or different and, independently or each other, denote an oxygen atom, a sulfur atom, or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group,

**R14** denotes hydrogen, a substituted or unsubstituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound; and

wherein **V** denotes an oxygen atom or an NR"amino group, with R" denoting hydrogen or a substituted or unsubstituted- $(C_1-C_{12})$ -alkyl group; and **R15** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a carbocyclic or  $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a carbocyclic or

heterocyclic aromatic group, a carboxamide group, or a sulfonamide group;

- (c) at least one oxidant; and
- (d) optionally other powdered cosmetic additives; and a liquid cosmetic component (A2).

### 29. (new) A three-component kit consisting of

a first dye carrier component (A1) comprising at least one hydrazone derivative of formula (I), or a physiologically compatible salt thereof:

wherein X denotes oxygen, sulfur or N-R2,

Y denotes C-R3 or nitrogen, and

Z denotes C-R4 or nitrogen,

provided that a heterocyclic ring in said at least one hydrazone derivative of the formula (I) contains at the most three hetero atoms;

**A** denotes hydrogen, an acetyl group, a trifluoroacetyl group, a formyl group, a  $(C_1-C_6)$ -alkyl-sulfonyl group, or an arylsulfonyl group;

R1 and R2 are the same or different and, independently of each other, denote a saturated or unsaturated ( $C_1$ - $C_{12}$ )-alkyl group, a halogen-substituted ( $C_1$ - $C_{12}$ )-alkyl group, a hydroxy-( $C_1$ - $C_{12}$ )-alkyl group, an amino-( $C_1$ - $C_{12}$ )-alkyl group, a sulfonic acid-( $C_1$ - $C_{12}$ )-alkyl group, a formyl group, a -C(O)-( $C_1$ - $C_{12}$ )-alkyl group, a substituted or unsubstituted -C(O)-phenyl group, a -C(O)NH-( $C_1$ - $C_{12}$ )-alkyl group, a substituted or unsubstituted

-C(O)NH-phenyl group, a substituted or unsubstituted phenyl group, or a benzyl group; R3 and R4 are the same or different and, independently of each other, denote hydrogen, a halogen atom, a saturated or unsaturated ( $C_1$ - $C_{12}$ )-alkyl group, a halogen-substituted ( $C_1$ - $C_{12}$ )-alkyl group, a hydroxyl group, a hydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a ( $C_1$ - $C_{12}$ )-alkoxy group, a cyano group, a nitro group, an amino group, a ( $C_1$ - $C_{12}$ )-alkylamino group, a di( $C_1$ - $C_1$ )-alkylamino group, a carboxyl group, a -C(O)O-( $C_1$ - $C_1$ )-alkyl group, a substituted or unsubstituted -C(O)O-phenyl group, a substituted or unsubstituted phenyl group, or a naphthyl group;

and when **Y** and **Z** denote C-**R3** and C-**R4**, **R3** and **R4** together with a remainder of the hydrazone derivative can form a heterocyclic or carbocyclic, saturated or unsaturated, substituted or unsubstituted ring system;

a second dye carrier component (A2) comprising at least one CH-active compound selected from the group consisting of compounds of formulas (II) to (IX) as follows:

wherein **R5** denotes a cyano group, a (CO)-**R6** carbonyl group, wherein **R6** denotes a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group or an aryl group;

wherein **R7** and **R8** are the same or different and, independently of each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound, and **D** denotes a sulfur atom or an oxygen atom;

wherein **R9** denotes a hydrogen atom, a nitrile group, a  $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic compound or a (CO)-R12 carbonyl group, wherein **R12** denotes hydrogen, a hydroxyl group, a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group, or an aryl group; and **R10** and **R11** are the same or different and, independently or each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly-

(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>2</sub>-C<sub>6</sub>)-alkyl group, an amino-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, or a carbocyclic or heterocyclic aromatic compound;

wherein **E** denotes an oxygen atom, a sulfur atom of an NR' amino group, with R' denoting hydrogen or a substituted or unsubstituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, and **R13** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a monohydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a polyhydroxy-(C<sub>2</sub>-C<sub>12</sub>)-alkyl group, a mono-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, a poly-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group;

wherein **G** and **G**' are the same or different and, independently or each other, denote an oxygen atom, a sulfur atom, or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group,

R14 denotes hydrogen, a substituted or unsubstituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound; and

wherein **V** denotes an oxygen atom or an NR"amino group, with R" denoting hydrogen or a substituted or unsubstituted-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group; and **R15** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a monohydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a polyhydroxy-(C<sub>2</sub>-C<sub>12</sub>)-alkyl group, a mono-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, a poly-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, an amino-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group; and a third component (A3) comprising an oxidant.

- 30. (new) A method of coloring hair, said method comprising the steps of:
  - a) applying a ready-to-use colorant for coloring hair to the hair;
- b) allowing the ready-to-use colorant applied to the hair in step a) to act on the hair for an exposure time of 5 to 60 minutes at a temperature from 20 to 50°C;
- c) after the exposure time of 5 to 60 minutes, rinsing the hair with water and optionally washing the hair with a shampoo; and
  - d) subsequently drying the hair;
    wherein said ready-to-use colorant contains
    at least one hydrazone derivative of formula (I), or a physiologically

compatible salt thereof:

wherein X denotes oxygen, sulfur or N-R2,

Y denotes C-R3 or nitrogen, and

Z denotes C-R4 or nitrogen,

provided that a heterocyclic ring in said at least one hydrazone derivative of the formula (I) contains at the most three hetero atoms;

A denotes hydrogen, an acetyl group, a trifluoroacetyl group, a formyl group, a  $(C_1-C_6)$ -alkyl-sulfonyl group, or an arylsulfonyl group;

R1 and R2 are the same or different and, independently of each other, denote a saturated or unsaturated (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a halogen-substituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a hydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, an amino-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a sulfonic acid-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a formyl group, a -C(O)-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted -C(O)-phenyl group, a -C(O)NH-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted -C(O)NH-phenyl group, a substituted or unsubstituted phenyl group, or a benzyl group; R3 and R4 are the same or different and, independently of each other, denote hydrogen, a haloge a halogen-substituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a hydroxyl group, a hydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a (C<sub>1</sub>-C<sub>12</sub>)-alkoxy group, a cyano group, a nitro group, an amino group, a (C<sub>1</sub>-C<sub>12</sub>)-alkylamino group, a di(C<sub>1</sub>-C<sub>12</sub>)-alkylamino group, a carboxyl group, a -C(O)O-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a substituted or unsubstituted -C(O)O-phenyl group, a substituted or unsubstituted or u

and when **Y** and **Z** denote C-**R3** and C-**R4**, **R3** and **R4** together with a remainder of the hydrazone derivative can form a heterocyclic or carbocyclic, saturated or unsaturated, substituted or unsubstituted ring system;

at least one CH-active compound selected from the group consisting of compounds of formulas (II) to (IX) as follows:

wherein **R5** denotes a cyano group, a (CO)-**R6** carbonyl group, wherein **R6** denotes a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group or an aryl group;

wherein **R7** and **R8** are the same or different and, independently of each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound, and **D** denotes a sulfur atom or an oxygen atom;

wherein **R9** denotes a hydrogen atom, a nitrile group, a  $(C_1-C_{12})$ -alkyl group, a carbocyclic or heterocyclic aromatic compound or a (CO)-R12 carbonyl group, wherein **R12** denotes hydrogen, a hydroxyl group, a  $(C_1-C_{12})$ -alkoxy group, an amino group, a  $(C_1-C_{12})$ -alkylamino group, a  $(C_1-C_{12})$ -alkyl group, or an aryl group; and **R10** and **R11** are the same or different and, independently or each other, denote hydrogen, a  $(C_1-C_{12})$ -alkyl group, a monohydroxy- $(C_1-C_{12})$ -alkyl group, a polyhydroxy- $(C_2-C_{12})$ -alkyl group, a mono- $(C_1-C_6)$ -alkoxy- $(C_1-C_6)$ -alkyl group, a poly- $(C_1-C_6)$ -alkoxy- $(C_2-C_6)$ -alkyl group, an amino- $(C_1-C_{12})$ -alkyl group, or a carbocyclic or heterocyclic aromatic compound;

wherein **E** denotes an oxygen atom, a sulfur atom of an NR' amino group, with R' denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group, and **R13** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a ( $C_1$ - $C_{12}$ )-alkyl group, a monohydroxy-( $C_1$ - $C_{12}$ )-alkyl group, a polyhydroxy-( $C_2$ - $C_{12}$ )-alkyl group, a mono-( $C_1$ - $C_6$ )-alkoxy-( $C_1$ - $C_6$ )-alkyl group, a carbocyclic or

heterocyclic aromatic group, a carboxamide group, or a sulfonamide group;

wherein **G** and **G**' are the same or different and, independently or each other, denote an oxygen atom, a sulfur atom, or an NR" amino group, with R" denoting hydrogen or a substituted or unsubstituted ( $C_1$ - $C_{12}$ )-alkyl group,

**R14** denotes hydrogen, a substituted or unsubstituted (C<sub>1</sub>-C<sub>12</sub>)-alkyl group or a carbocyclic or heterocyclic, substituted or unsubstituted aromatic compound; and

wherein **V** denotes an oxygen atom or an NR"amino group, with R" denoting hydrogen or a substituted or unsubstituted-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group; and **R15** denotes a hydrogen atom, a halogen atom, a hydroxyl group, a cyano group, a nitro group, a (C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a monohydroxy-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a polyhydroxy-(C<sub>2</sub>-C<sub>12</sub>)-alkyl group, a mono-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, a poly-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl group, an amino-(C<sub>1</sub>-C<sub>12</sub>)-alkyl group, a carbocyclic or heterocyclic aromatic group, a carboxamide group, or a sulfonamide group; and at least one oxidant.

### AMENDMENTS TO THE SPECIFICATION:

Please make the following changes at the indicated locations in the specification:

Page 1, line 1, please delete "DESCRIPTION".

Page 1, between line 2 (title) and line 3 (the first paragraph), please insert the following headings and paragraph:

#### CROSS-REFERENCE

This is the US National Stage of PCT/EP 2004/012941, filed on November 15, 2004 in the European Patent Office.

#### **BACKGROUND OF THE INVENTION**

Page 1, between the third and fourth paragraphs:

# **SUMMARY OF THE INVENTION**

Page 21, please add the following after the last line of text:

0.40 g of potassium persulfate

The afore-indicated components were mixed with one another homogeneously at room temperature (20-25°C) or with gentle heating (35-40°C). If necessary, the pH of the ready-to-use colorant (A) was adjusted to the value given in Table 2 with sodium hydroxide solution, sodium carbonate, ammonia or citric acid.

The ready-to-use colorant was applied to bleached hair and uniformly distributed with a brush. After an exposure time of 30 minutes at 40°C, the hair was rinsed with lukewarm water, washed with a commercial shampoo, rinsed with lukewarm water and then dried.

The amount of CH-active compound of formulas (II) to (IX) and the colorations obtained are collected in the following Table 2.

Table 2

Example	CH-Active Compound Used,		рН	Coloration
No.	(Amount in g)			
7	thiobarbituric acid	(0.36 g)	9.3	copper shades
8	malonic acid dinitrile	(0.17 g)	9.1	golden-yellow

Unless otherwise indicated, all percentages given in the present application are by weight.

# **REMARKS**

#### I. CLAIM CHANGES

New claims 16 to 30 have been added. The original claims 1 to 15 were English translations of a foreign patent document, which were not prepared according to US Patent Office Rules. <u>Original claims 1 to 15 have been canceled to overcome the claim objections and rejection of kit claims for indefiniteness under 35 U.S.C. 112, second paragraph.</u>

However new claims 16 to 30 contain the same subject matter as canceled claims 1 to 15 respectively. New claims 16 to 30 include claims 16 to 25 for the agent for coloring keratin fibers, independent kit claims 26, 27, 28, and 29, and independent method claim 30.

The new claims 16 to 30 have been drafted in accordance with US Patent Office Rules. E.g. proper Markush wording is used to express alternatives among different groups or compounds. Consistent wording is used in the new claims.

Antecedent basis for claim terms is maintained.

Thus it is respectfully submitted that the new claims 16 to 30 should not be rejected under 35 U.S.C. 112, second paragraph for indefiniteness. Also the changes in their wording should overcome the objection to the wording of the original claims 1 to 15.

### II. PREVIOUSLY ALLOWED CLAIMS

The previously filed agent claims 1 to 10 and method claim 15 were allowed over the prior art of record according to paragraph 6 on page 3 of the Office Action.

New agent claims 16 to 25 contain the same subject matter as canceled agent claims 1 to 10 and are of the same scope. New method claim 30 contains the same subject matter and is of the same scope as canceled method claim 15.

In view of the foregoing allowance of new agent claims 16 to 25 and method claim 30 in response to this amendment is respectfully solicited.

### III. SPECIFICATION CHANGES

The specification has been amended to provide a cross-reference to the International Application.

Also standard section headings recommended by US Patent Office Rules have been added.

In addition the omitted subject matter at the end of the specification has been added by the changes on page 21 of the originally filed specification. If necessary the PCT International Application can be checked to verify that no new matter has been added.

The policy under 37 C.F.R. 1.57 (a) and M.P.E.P. 201.17 applies so that the addition of the omitted subject matter on page 21 of the specification should not be

rejected as "new matter", since the application includes a claim of priority of invention, identifies the international application and provides its international filing date.

Should the Examiner require or consider it advisable that the specification,

claims and/or drawing be further amended or corrected in formal respects to put this

case in condition for final allowance, then it is requested that such amendments or

corrections be carried out by Examiner's Amendment and the case passed to issue.

Alternatively, should the Examiner feel that a personal discussion might be helpful in

advancing the case to allowance, he or she is invited to telephone the undersigned at

1-631-549-4700.

In view of the foregoing, favorable allowance is respectfully solicited.

Respectfully submitted,

Michael J. Striker,

Attorney for the Applicants

Reg. No. 27,233

38